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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/502,463

07/26/2004

Burkhard Bustgens

158.002

4000

7590

09/20/2010

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EXAMINER

LOUIE, MANDY C

ART UNIT

PAPER NUMBER

1715

MAIL DATE

DELIVERY MODE

09/20/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/502,463	Applicant(s) BUSTGENS, BURKHARD	
	Examiner MANDY C. LOUIE	Art Unit 1715	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 64 and 65 is/are pending in the application.
- 4a) Of the above claim(s) 65 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Newly submitted claim 65 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the special technical feature (i.e. application device with first measuring system with stationary components [Slupe col 4, ln 35-37], computer control [Slupe, abstract], painting elements [printhead, Slupe, abstract], rollers or sliding elements [Hess, Fig 8a], wherein the painting elements protrude laterally over the rollers [Hess, Fig 8a], and a second measurement system [Slupe, col 11, ln 55-67]) is taught by Slupe in view of Hess, which supports that the inventions lack inventive steps.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 65 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 64 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which

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was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The limitation "array of paint applying elements protrude laterally over the wheels" lack support wherein such scope also includes having the paint applying elements directly on the wheels, wherein the closest support for such language may be found in Fig. 11; however, does not show that the paint applying elements may be formed directly on the wheels. Hence, the specification is insufficient to disclose the entire scope of the claim language. One of ordinary skill in the art would have not reasoned that the inventor(s), at the time the application was filed, had possession of the presently claimed invention.

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 64 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. Regarding claim 64, the phrase "like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

- b. Claim 64 recites the limitation "the wheels" in lines 18. There is insufficient antecedent basis for this limitation in the claim.

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- c. Claim 64 recites paints applying elements protrudes laterally over the wheels is indefinite, since it is unclear how the device can operate if the application elements are directly over the wheels.
- d. The limitation of claim 64, "applying paint at a position where paint has to be applied, but due to disturbed intervisibility between the application device and a minimum required number of stationary components the first measurement system is unable to provide valid position data by changing the position of the paint application device to a position where a position is available from the first measurement system" is indefinite because a position that is available from the first measurement system would provide valid position data. Presently, the limitation will be interpreted to mean that in the case of disturbed intervisibility between the applicator and stationary components of the first measurement system resulting to unable to provide valid position data, paint may be applied to an area to be painted by changing the position of the applicator to a new position with valid position data.
- e. The limitation of claim 64, "moving the application device from that position to the position where no valid position data was available, whereby position is calculated by the computer control based on the last valid position of the first measurement system and movement data from the second measurement system, which measures a motion of the paint application device" is indefinite because "that position to the position where no valid position data was available" and "the last valid position" lack antecedent basis.

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2. The other dependent claims do not cure the defects of the claims from which they depend; therefore, the dependent claims are also rejected under 35 U.S.C. 112, second paragraph.

Claim Objections

3. Claim 64 is objected to because of the following informalities:
- a. "measure geometric properties of the wall" in line 11 should be changed to "measuring geometric properties of the wall".
 - b. "paint applying elements protrudes" should be changed to "paint applying elements protrude"
 - c. "Second measurement system^[0012]" in line 30 should be changed to "second measurement system".
- Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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2. Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over Slupe [US 6942402] in view of Saksa [US 20030037448] and Desormeaux [US 6312124].

Regarding claim 64, Slupe discloses a method of applying a color design onto a surface [col 1, ln 40-45] with obstacles (i.e. frame) [col 5, ln 3-50] with a movable application device [col 3, ln 49-50] having a first position measurement system configured to measure its position relative to stationary components [col 9, ln 5-20], further having a computer control (microprocessor) [abstract], paint application elements (print head) [abstract], whereby, when the application device is moved on the surface the positions of the paint application device are measured and paint application by the paint application elements is controlled based on the measured position [abstract], the method comprising:

A first step, the first step including:

positioning multiple stationary components of the first position measurement system at fix positions [col 9, ln 5-20] and defining a reference coordinate system [col 9, ln 22-60]

measuring geometric properties of a surface within the reference coordinate system to generate a first data set (calibration to estimate the surface contour), which is a digital representation of the geometry (correct image data to sent to printer which was determined by algorithm executed by processor) of the surface [col 10, ln 17-35].

generating a second data set by assigning color data of the color design to the first data set [col 10, ln 35-37]

A second, paint applying step, the step including

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applying paint alongside a region containing previously applied paint by moving the application device [col 10, ln 7-16],

applying paint at a position where paint has to be applied, but due to disturbed intervisibility between the application device and a minimum required number of stationary components the first measurement system is unable to provide valid position data [col 10, ln 54-60] by

changing the position of the paint application device to a position, where a valid position is available from the first measurement system [col 10, ln 55-62]

and moving the application device from that position to the position, where no valid position data was available whereby position is calculated by the computer control based on the last valid position of the first measurement system and movement data from a second measurement system [col 10, ln 54-60], which measures a velocity (motion) of the paint application device [col 9, ln 60-63].

However, Slupe appears to be silent in teaching paint application element comprises rollers or slider elements (such as wheels) and that the wheels do not get into contact to the previously applied paint, whereby the application device is configured such that the array of paint applying elements protrudes laterally over the wheels. Saksa remedies this.

Regarding claim 64, Saksa teaches paint application element comprises a roller or slider element (such as a wheel), whereby the application device is configured such that the array of paint applying elements protrudes laterally over the wheels [Fig. 3], and that such configuration would allow the wheel to not get into contact with a previously

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applied paint (since the paint applicator extends beyond the width of the wheel as show in Fig. 3). Although Saksa teaches one wheel, mere duplication of parts (i.e. wheels) has no patentable significance unless new and unexpected result is produced.

It would have been obvious to one of ordinary skill in the art to modify the printer of Slupe with the print assembly configuration shown by Saksa. One would have been motivated to do so in order to allow for better measurement of positional information of the printer via rotation of the wheels [0030].

Furthermore, it would have been obvious to one of ordinary skill in the art to provide rolling elements such as wheels for a movable application device as taught by Slupe in order for the application device to smoothly move over a surface.

In addition Slupe teaches that positional information may be derived from rotations of the wheel (i.e. second data from measured movement), which is another obvious means for detecting positional values of a movable application device.

However, Slupe in view of Saksa appears to be silent in applying the paint to a surface of a wall. Desormeaux remedies this.

Regarding claim 64, Desormeaux provides a process for using a manual printing device to print on surfaces such as walls [abstract]. It would have been obvious to one of ordinary skill in the art to apply designs to a wall with a manual printing device as taught by the prior art, so as to provide aesthetic decorations or information via automation.

Response to Arguments

4. Applicant's arguments filed 7/12/10 have been fully considered but they are not persuasive.

Regarding applicant's argument of the method providing a means to paint surfaces entirely with a slow drying paint such as house paint [pg 5 of remarks], it is noted that house paint is not required by the claim.

Regarding applicant's argument of Hess is moot since Hess is withdrawn and Saksa is provided (as aforementioned) as a secondary reference, which was necessitated by applicant's amendment "moving the application device in a way that the wheels do not get into contact to the previously applied paint whereby the application device is configured applied paint array of paint applying elements protrudes laterally over the wheels".

Arguments of Saund are moot since new grounds of rejection is provided above necessitated by amendments.

Applicant's arguments with respect to claim 64 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

1. No claim is allowed.
2. Claim 64 is rejected for the reasons aforementioned.
3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MANDY C. LOUIE whose telephone number is (571)270-5353. The examiner can normally be reached on Monday to Friday, 7:30AM - 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571)272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. C. L./
Examiner, Art Unit 1715

/Timothy H Meeks/
Supervisory Patent Examiner, Art Unit 1715